

# PHYSICS

## EXPERIMENTAL STUDIES OF DISPERSIVE EXTINCTION PHENOMENON OF THE COSMIC RED SHIFT

G.A. Clifton, P.B. McCoy, L.J. Wang\*, University of Tennessee at Chattanooga,  
Department of Physics, Geology, and Astronomy, Chattanooga, TN 37402,  
Lingjun-Wang@utc.edu

Dispersive Extinction Theory (DET) of Red Shift offers an alternate theory to the prevailing Big Bang and the Doppler Shift theory. Some assumptions in the prevailing theories have begun to leave scientists puzzled about their accuracies. The Big Bang theory depends heavily on the linearity of Hubble's Law, predicts a dark mass that is thirty times greater than the observed real mass, and assumes that the enormous mass and energy that the universe started with originated from nowhere (Wang 2005). The Big Bang theory violates Maxwell's velocity distribution of a thermodynamic ensemble (Wang, 2005). DET explains the red shift of a source as a result of dispersive extinction by the space medium. This shift caused by the space medium would cause the wavelength of incoming light to shift either towards the red part of the visible spectrum or to the blue part. The main methods of procedure will involve using a 1974 Cary-14 model research grade spectrophotometer configured with a sensitive linear array and interfaced to a digital computer to analyze the shifts that occur in a light source through different mediums. A sample holder attached to the spectrophotometer will serve as the different medium for which the light will travel through. Once being incident upon a series of high quality optical devices, the spectral lines that are emitted will be of the main concern for the experiment. The linear array will be used to gather and analyze data appropriately.